

## **Development of Virtual Mining Company for KPI Dashboard Design**

**Faculty advisor:** Prof. Chi-Guhn Lee

We aim to develop a virtual mining company with three main division: maintenance, operations and management. The three divisions are seamless integrated so that the performance in one division impacts on that of others. The student is expected to develop a simulation model mimicking a mining company by utilizing data from actual mining companies as much as possible. The simulation model should conform to known reliability models and probability laws and base the model on probability distributions fit to given data whenever necessary. The student may have to interact with KPI project if necessary. The student needs to have a good understanding on simulation modeling, probability, statistics and python programming.

**Contact:** Prof. Lee, [cglee@mie.utoronto.ca](mailto:cglee@mie.utoronto.ca)